



## Department of Energy

Richland Field Office

P.O. Box 550

Richland, Washington 99352

9305745

94-RPS-071

Mr. David B. Jansen  
State of Washington  
Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504-7600



Dear Mr. Jansen:

HANFORD FACILITY DANGEROUS WASTE PART A PERMIT APPLICATION FORM 3,  
REVISION 4, FOR THE 303-K STORAGE FACILITY (WA7890008967) (TSD: S-3-1)

Enclosed is the Hanford Facility Dangerous Waste Part A Permit Application (Part A) Form 3, Revision 4, for the 303-K Storage Facility. The 303-K Storage Facility is located in the 300 Area of the Hanford Facility and is used for the storage of liquid and solid mixed waste in U.S. Department of Transportation-specification containers. This Part A was revised to add eight dangerous waste codes to container storage at the 303-K Storage Facility.

Dangerous Waste Codes F002, F005, and state-only WC02 have been added because a complete analysis of the waste stored at the 303-K Storage Facility revealed that spent halogenated and non-halogenated solvents and waste with low concentrations of carcinogenic solvents were present. Dangerous Waste Codes D029, D035, D039, and D040 have been added because of the revision to the Washington Administrative Code (WAC) 173-303 in March 1991 that added 26 organic constituents to the Toxicity Characteristic List. Dangerous Waste Code D037 has also been added, because of analysis of an unknown mixed waste has shown that the mixed waste contained pentachlorophenol. These dangerous waste codes have been added in compliance with WAC 173-303. This regulation requires submittal of a revised Part A that includes any previously unidentified waste that might be treated, stored, or disposed of at a treatment, storage, and/or disposal unit with interim status.

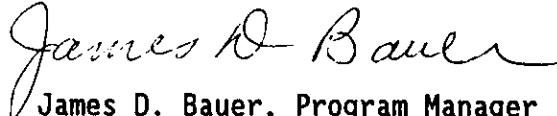
Mr. Jansen  
94-RPS-071

-2-

DEC 16 1993

Should you have any questions regarding the 303-K Storage Facility Part A, Revision 4, please contact Mr. C. E. Clark, U.S. Department of Energy, Richland Operations Office on (509) 376-9333 or Mr. R. C. Bowman, Westinghouse Hanford Company on (509) 376-4876.

Sincerely,



James D. Bauer, Program Manager  
Office of Environmental Assurance,  
Permits, and Policy  
DOE Richland Operations Office

EAP:CEC



R. E. Lerch, Deputy Manager  
Restoration and Remediation  
Westinghouse Hanford Company

Enclosure:  
303-K Storage Facility Dangerous  
Waste Part A Permit Application  
Form 3, Revision 4

cc w/enclosure:  
D. L. Duncan, EPA  
T. M. Michelena, Ecology  
D. C. Nylander, Ecology  
Administrative Records, H6-08

cc w/o enclosure:  
D. R. Butler, Ecology  
J. M. Atwood, Ecology  
R. C. Bowman, WHC  
R. E. Lerch, WHC  
S. M. Price, WHC

Please print or type in the unshaded areas only  
(fill-in areas are spaced for elite type, i.e., 12 character/inch).

FORM <b>3</b>	<h2 style="margin: 0;">DANGEROUS WASTE PERMIT APPLICATION</h2>	1. EPA/STATE I.D. NUMBER <div style="border: 1px solid black; padding: 2px; text-align: center;">           W A 7 8 9 0 0 0 8 9 6 7         </div>												
FOR OFFICIAL USE ONLY														
APPLICATION APPROVED	DATE RECEIVED (mo., day, & yr.)	COMMENTS												
II. FIRST OR REVISED APPLICATION														
Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or if this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.														
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <b>A. FIRST APPLICATION</b> (place an "X" below and provide the appropriate date)  <input type="checkbox"/> 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;"> <table border="1" style="border-collapse: collapse;"> <tr><td>MO.</td><td>DAY</td><td>YR.</td></tr> <tr><td>01</td><td></td><td>72</td></tr> </table> </div> <div>           FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, &amp; yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)         </div> </div> </div> <div style="width: 48%;"> <input type="checkbox"/> 2. NEW FACILITY (Complete item below)  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;"> <table border="1" style="border-collapse: collapse;"> <tr><td>MO.</td><td>DAY</td><td>YR.</td></tr> <tr><td></td><td></td><td></td></tr> </table> </div> <div>           FOR NEW FACILITIES, PROVIDE THE DATE (mo., day, &amp; yr.) OPERATION BEGAN OR IS EXPECTED TO BEGIN         </div> </div> </div> </div>			MO.	DAY	YR.	01		72	MO.	DAY	YR.			
MO.	DAY	YR.												
01		72												
MO.	DAY	YR.												
<b>B. REVISED APPLICATION</b> (place an "X" below and complete Section I above) <input checked="" type="checkbox"/> 1. FACILITY HAS AN INTERIM STATUS PERMIT <input type="checkbox"/> 2. FACILITY HAS A FINAL PERMIT														
III. PROCESSES - CODES AND CAPACITIES														
<b>A. PROCESS CODE</b> - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the (Section III-C).														
<b>B. PROCESS DESIGN CAPACITY</b> - For each code entered in column A enter the capacity of the process.														
<b>1. AMOUNT</b> - Enter the amount.														
<b>2. UNIT OF MEASURE</b> - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.														
PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY												
<b>Storage:</b>														
CONTAINER (barrel, drum, etc)	S01	GALLONS OR LITERS												
TANK	S02	GALLONS OR LITERS												
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS												
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS												
<b>Disposal:</b>														
INJECTION WELL	D80	GALLONS OR LITERS												
LANDFILL	D81	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER												
LAND APPLICATION	D82	ACRES OR HECTARES												
OCEAN DISPOSAL	D83	GALLONS PER DAY OR LITERS PER DAY												
SURFACE IMPOUNDMENT	D84	GALLONS OR LITERS												
PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY												
<b>Treatment:</b>														
TANK	T01	GALLONS PER DAY OR LITERS PER DAY												
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY												
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR												
OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY												
UNIT OF MEASURE	UNIT OF MEASURE CODE													
GALLONS	G													
LITERS	L													
CUBIC YARDS	Y													
CUBIC METERS	C													
GALLONS PER DAY	U													
UNIT OF MEASURE	UNIT OF MEASURE CODE													
LITERS PER DAY	V													
TONS PER HOUR	D													
METRIC TONS PER HOUR	W													
GALLONS PER HOUR	E													
LITERS PER HOUR	H													
UNIT OF MEASURE	UNIT OF MEASURE CODE													
ACRE-FEET	A													
HECTARE-METER	F													
ACRES	B													
HECTARES	Q													

EXAMPLE FOR COMPLETING SECTION III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE	A. PRO- CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE	A. PRO- CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEAS- URE (enter code)				1. AMOUNT (specify)	2. UNIT OF MEAS- URE (enter code)	
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	11,000	G		7				
2					8				
3					9				
4					10				

Continued from the front.

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESS (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

S01

The 303-K Storage Facility is used for the storage of mixed waste in Department of Transportation-specification containers. Both liquid and solid waste is stored in the 303-K Storage Facility. The liquid waste is stored on a 610 square foot (57 square meter) pad within the building. The building provides secondary containment for the contents of the containers. The solid waste is stored outside the building on a 4,590 square foot (426 square meter) asphalt, concrete, and gravel pad. The storage area is surrounded by a chain link fence. Approximately 200 55-gallon (208-liter) containers (or more smaller-sized containers) can be stored at the 303-K Storage Facility.

IV. DESCRIPTION OF DANGEROUS WASTES

- A. DANGEROUS WASTE NUMBER - Enter the four digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.
- B. ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS .....	P	KILOGRAMS .....	K
TONS .....	T	METRIC TONS .....	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

- Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

EXAMPLE FOR COMPLETING SECTION IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 6 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2			T 0 3 D 8 0	included with above

Continued from page 2.  
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)										
W A 7 8 9 0 0 0 8 9 6 7										
IV. DESCRIPTION OF DANGEROUS WASTES (continued)										
LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES			
							1. PROCESS CODES (enter)			
1	F	0	0	1	15,000	P	S01			Storage - Container (See IV.E.1)
2	W	C	0	1						
3	W	P	0	1						
4	W	T	0	1						
5	D	0	0	1						
6	F	0	0	3						
7	W	T	0	2						
8	F	0	0	2						
9	F	0	0	5						
10	W	C	0	2						
11	D	0	0	2						
12	D	0	0	6						
13	D	0	2	9						
14	D	0	3	5						
15	D	0	3	9						
16	D	0	4	0						included with above
17	W	T	0	2	40,000	P	S01			Storage - Container (See IV.E.2)
18	D	0	0	7						included with above
19	W	T	0	1	40,000	P	S01			Storage - Container (See IV.E.2)
20	D	0	0	1						
21	D	0	0	5						
22	D	0	0	6						included with above
23	D	0	0	2	1,700	P	S01			Storage - Container (See IV.E.3)
24	D	0	0	1	5,100	P	S01			Storage - Container (See IV.E.4)
25	D	0	0	8	5,500	P	S01			Storage - Container (See IV.E.5)
26										

Continued from page 2.  
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)										
W A 7 8 9 0 0 0 8 9 8 7										
IV. DESCRIPTION OF DANGEROUS WASTES (continued)										
LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES			
	1	2	3	4			1. PROCESS CODES (enter)			2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	W	T	0	2	300,000	P	S01			Storage - Container (See IV.E.6)
2	D	0	0	1						
3	D	0	0	4						
4	D	0	0	5						
5	D	0	0	6						
6	D	0	0	7						
7	D	0	0	9						
8	D	0	1	1						included with above
9	D	0	0	2	1,500	P	S01			Storage - Container (See IV.E.7)
10	D	0	0	7						included with above
11	D	0	0	2	60	P	S01			Storage - Container (See IV.E.8)
12	D	0	0	4						
13	D	0	0	7						
14	D	0	1	1						included with above
15	W	P	0	2	200	P	S01			Storage - Container (See IV.E.9)
16	D	0	3	7	44	P	S01			Storage - Container (See IV.E.10)
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										

Continued from the front.

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM SECTION D(1) ON PAGE 3.

SEE FOLLOWING PAGE

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

This information is provided on the attached drawings and photos.

LATITUDE (degrees, minutes, & seconds)										LONGITUDE (degrees, minutes, & seconds)									

VIII. FACILITY OWNER

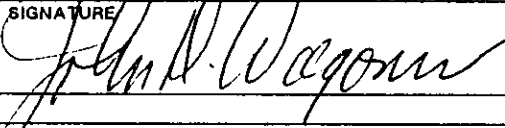
☒ A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER															2. PHONE NO. (area code & no.)														
3. STREET OR P.O. BOX										4. CITY OR TOWN										5. ST.					6. ZIP CODE				

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME (print or type) John D. Wagoner, Manager U.S. Department of Energy Richland Operations Office		SIGNATURE 		DATE SIGNED 12/16/93	
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X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME (print or type)  SEE ATTACHMENT		SIGNATURE		DATE SIGNED	
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#### Section IV.E. Description of Dangerous Wastes

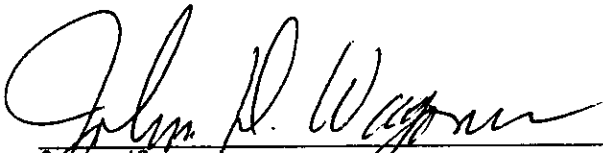
The 303-K Storage Facility is used for the storage of mixed waste in U.S. Department of Transportation-specification containers. This waste consists of the following:

1. Approximately 15,000 pounds (6,800 kilograms) per year of spent solvents [This includes spent degreasing solvents (F001, WC01, WP01, and WT01) that were occasionally mixed with ethyl acetate (D001, F003, and WT02). This also includes spent halogenated and nonhalogenated solvents (F002 and F005) as well as waste with low concentrations of carcinogenic solvents (WC02). Waste solvents are corrosive (D002) and contain cadmium (D006), 1,1-dichloroethylene (D029), methyl ethyl ketone (D035), tetrachloroethylene (D039), and trichloroethylene (D040)].
2. Approximately 80,000 pounds (36,300 kilograms) per year of heat treat salts contaminated with naturally occurring radioactive potassium-40 [The heat treat salts were generated from both beta bath [40,000 pounds (18,200 kilograms) per year] and quench bath [40,000 pounds (18,000 kilograms) per year]. The beta bath salts consist of potassium chloride and sodium chloride (WT02) and chromium (D007). The quench bath salts consist of potassium nitrate, sodium nitrate, sodium nitrite, potassium chloride, and sodium chloride. The quench bath salts are toxic extremely hazardous waste (WT01) and are ignitable (D001) because of the presence of oxidizers (solid nitrates and nitrites). The quench bath salts also contain barium (D005) and cadmium (D006).
3. Approximately 1,700 pounds (770 kilograms) of corrosive (D002) copper fluoro-zirconate acid crystals from the bottom of the waste acid tanks in the 334-A Building
4. Approximately 5,100 pounds (2,300 kilograms) per year of Zircaloy-2 and beryllium/Zircaloy-2 chips and fines before and after concreting the waste in the 304 Building (This material is designated ignitable (D001) because of its pyrophoric properties.)
5. Approximately 5,500 pounds (2,500 kilograms) per year of metallic lead (D008)
6. Approximately 300,000 pounds (136,100 kilograms) per year of centrifuge and filter press sludge designated as a toxic dangerous waste (WT02) by the mixture rule and ignitable (D001) because of the presence of solid nitrates [The waste may also contain the following ions introduced into the 300 Area Waste Acid Treatment System: arsenic (D004), barium (D005), cadmium (D006), chromium (D007), mercury (D009), and silver (D011)].
7. Approximately 1,500 pounds (680 kilograms) per year of corrosive (D002) waste acid absorbed by sedimentary opal clay [This waste also contains chromium (D007)].
8. Approximately 60 pounds (27 kilograms) per year of waste acids contaminated with oil [The waste acids are designated as corrosive (D002) and contain arsenic (D004), chromium (D007), and silver (D011)].
9. Approximately 200 pounds (91 kilograms) per year of waste hydraulic oil containing halogenated hydrocarbons (WP02)
10. Approximately 44 pounds (20 kilograms) of a mixed waste that contains pentachlorophenol (D037)

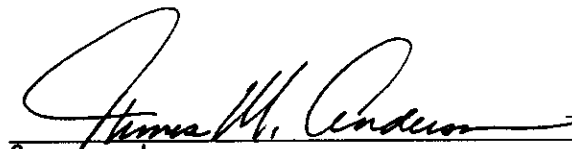


X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

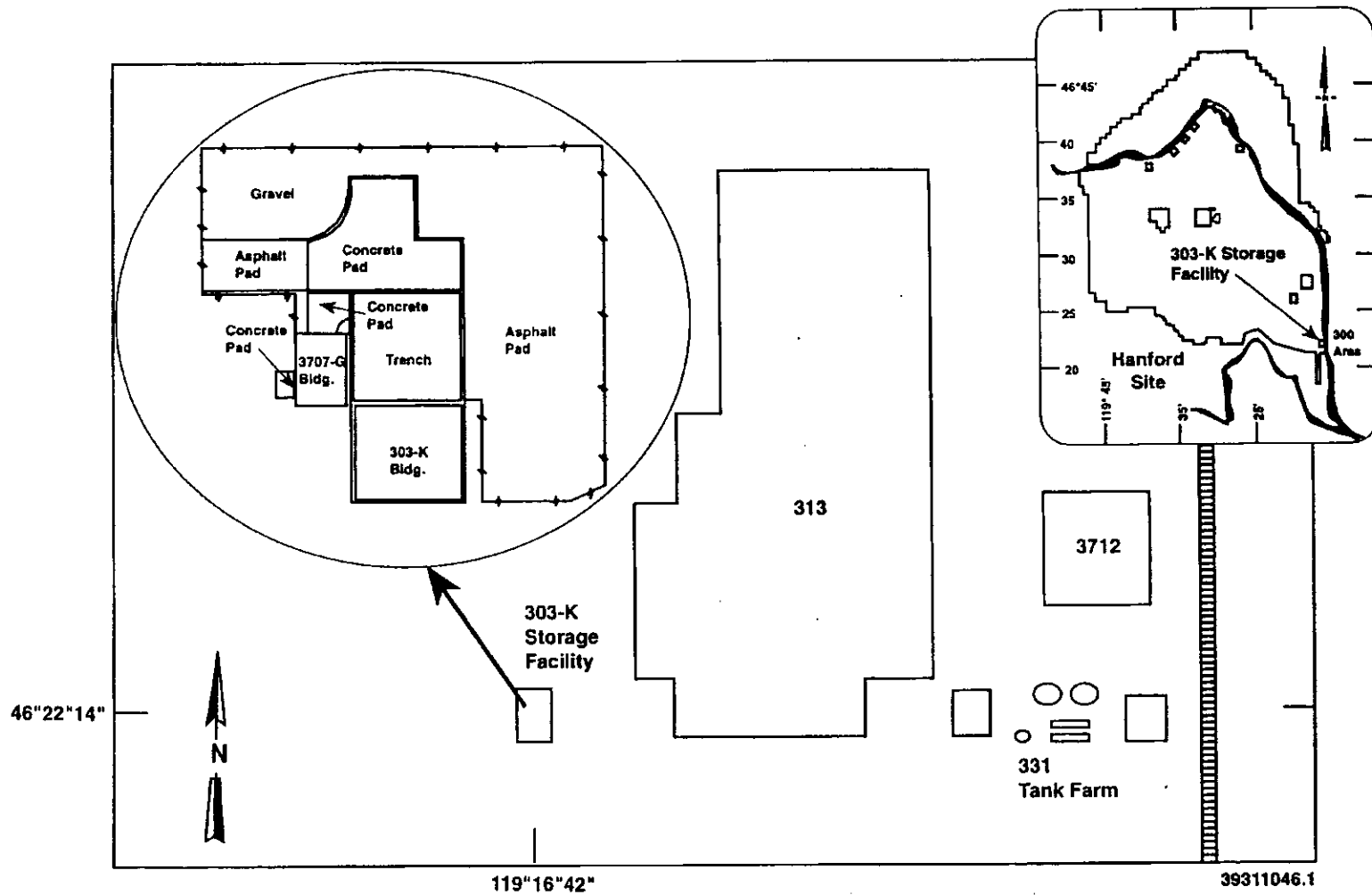
  
\_\_\_\_\_  
Owner/Operator  
John D. Wagoner, Manager  
U.S. Department of Energy  
Richland Operations Office

12/16/93  
Date

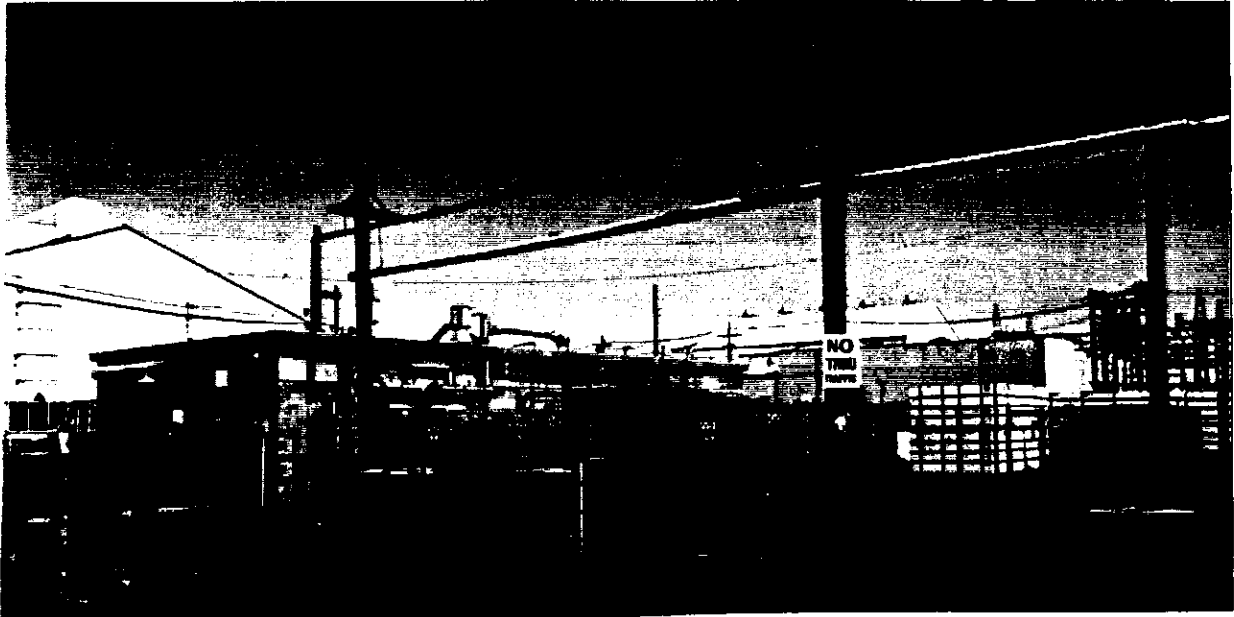
  
\_\_\_\_\_  
Co-operator  
Thomas M. Anderson, President  
Westinghouse Hanford Company

12/1/93  
Date

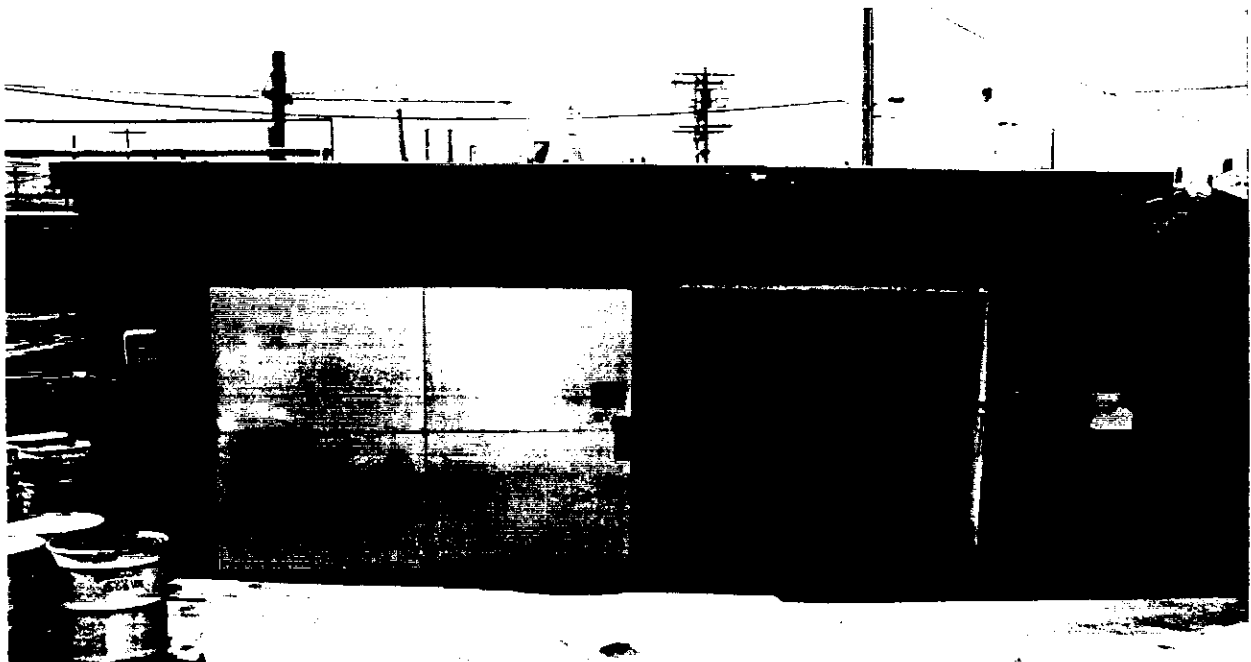
# 303-K Storage Facility



## 303-K Storage Facility



8704479-10CN  
(PHOTO TAKEN 1987)



46°22'14"  
119°16'42"

89050353-12CN  
(PHOTO TAKEN 1989)

# CORRESPONDENCE DISTRIBUTION COVERSHEET

<b>Author</b> J. D. Bauer, RL R. E. Lerch, WHC (J. F. Williams Jr., WHC)	<b>Addressee</b> D. B. Jansen, Ecology	<b>Correspondence No.</b> Incoming 9305745 Xref 9360103D
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**Subject:** HANFORD FACILITY DANGEROUS WASTE PART A PERMIT APPLICATION FORM 3,  
 REVISION 4, FOR THE 303-K STORAGE FACILITY (WA7890008967)  
 (TSD: S-3-1)

## INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		J. G. Adler	H6-23	
		B. A. Austin	B2-35	
		R. J. Bliss	B3-04	
		R. C. Bowman	H6-24	X
		G. D. Carpenter	H6-30	
		D. J. Carrell	H6-22	
		B. G. Erlandson	H6-20	
		G. W. Jackson, Assignee	H6-21	
		R. E. Lerch	B3-63	
		P. J. Mackey	B3-15	X
		H. E. McGuire, Level 1	B3-63	
		S. M. Price	H6-23	X
		J. A. Remaize	L6-18	X
		F. A. Ruck III	H6-23	
		J. M. Steffen	N1-47	
		B. L. Vedder	H6-22	
		J. L. Waite	B2-35	
		D. J. Watson	X0-41	
		E. A. Weakley	L6-26	X
		J. F. Williams Jr.	H6-24	X
		EPIC	H6-08	X
		JFW File/LB	H6-24	X
		RCRA File/GHL	H6-23	X